

(19) World Intellectual Property
Organization
International Bureau



24 MAR 2005



(43) International Publication Date
4 November 2004 (04.11.2004)

PCT

(10) International Publication Number
WO 2004/094937 A3

(51) International Patent Classification⁷: **B65H 75/48**,
G01B 3/10

(21) International Application Number:
PCT/US2004/008052

(22) International Filing Date: 17 March 2004 (17.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/459,528 1 April 2003 (01.04.2003) US

(71) Applicant (for all designated States except US): **THE
PERFECT MEASURING TAPE CO.** [US/US]; 1116
Summit Street, Toledo, OH 43604 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **HUI, Sun, Chao**
[CN/CN]; 165 Duyi Lane, Room 204, Yuyao City, Zhe-
jiang Province (CN).

(74) Agent: **FRASER, Donald, R.**; Fraser Martin Buchanan
Miller LLC, 132 West Second Street, Perrysburg, OH
43551-1401 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

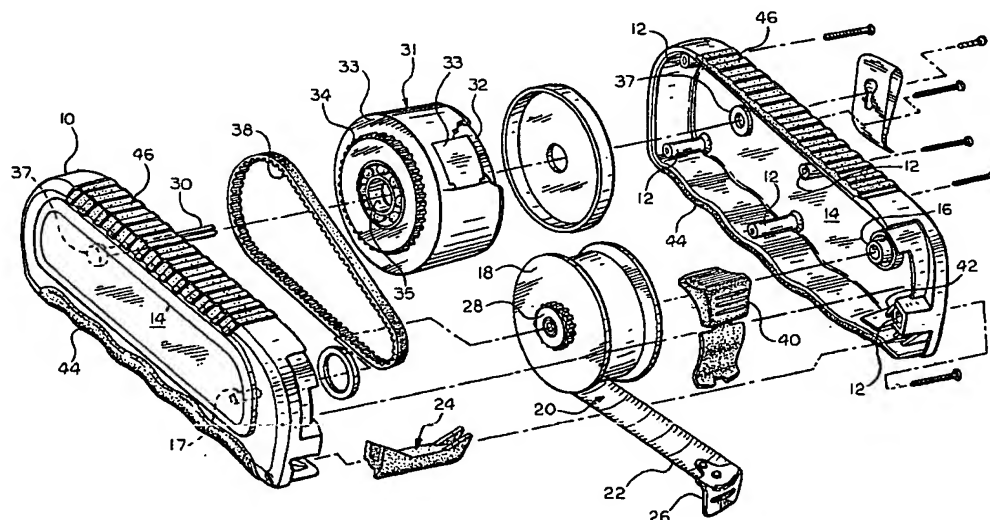
Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:
7 April 2005

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: MEASURING TAPE



(57) Abstract: A measuring tape housed within an ergonomically configured housing with a spirally wound spring motor is dis-
closed which facilitates the paying out and retraction of the flexible metal blade carrying the measuring indicia thereon.

WO 2004/094937 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/08052

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B65H 75/48; G01B 3/10

US CL : 242/375.3; 33/761, 767

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 242/375.3; 33/761, 767

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5820057 (Decarolis et al) 13 Oct. 1998 (13.10.1998), see figures 1-4.	1-4, 6 and 8
Y		5 and 7
Y	US 4551847 (Caldwell) 05 Nov. 1985 (05.11.1985), see figure 1.	5
Y	US 6182916 B1 (Lin) 06 Feb. 2001 (06.02.2001), see figure 2, column 2, lines 31-45.	7



Further documents are listed in the continuation of Box C.



See patent family annex.

Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

24 December 2004 (24.12.2004)

Date of mailing of the international search report

10 FEB 2005

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703)305-3230

Authorized officer

Kathy Matecki

Telephone No. 703-308-1113